

ACC NR: A16033956

SOURCE CODE: UR/029/66/00/005/6693/0702

AUTHOR: Kutateladze, S. S.; Leont'yev, A. I.; Pimenov, A. K.

ORG: Institute of Thermophysics, Siberian Department, Academy of Sciences, SSSR
(Institut teplofiziki Sibirskogo otdeleniya Akademii nauk SSSR)

TITLE: Contribution to the calculation of heat exchange in turbulent flow of gas in a long cylindrical channel for arbitrary distribution of the heat load and for essentially nonisothermal conditions

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 5, 1966, 693-702

TOPIC TAGS: gas flow, turbulent flow, Reynolds number, boundary layer heat transfer

ABSTRACT: This is a continuation of earlier work (Turbulentnyy po granichnyy sloy szhimayevogo gaza [Turbulent Boundary Layer of a Compressible Gas], Izd-vo SO AN SSSR and earlier papers), where some difficulties arising in the traditional criterial reduction of experimental data on transfer in the initial section of a cylindrical tube were pointed out, and where ways of getting around these difficulties were indicated. The method proposed there, based essentially on initially representing the experimental data in the form of a functional relation between the Stanton number and the characteristic Reynolds number of the boundary layer, is employed in the present paper to study the turbulent flow of gas in a long cylindrical channel for arbitrary distribution of the heat load. The wall temperature is calculated on the basis of the analogy between the external and internal problem and on the basis of the conservative

Card 1/2

UDC: 536.24.01: 532.542

ACC NR: AP6033956

nature of the law of heat exchange relative to variation of the boundary conditions. The influence of the non-isothermal conditions on heat exchange in the turbulent boundary layer is estimated in accordance with a limiting theory likewise described in the earlier paper. It is assumed that the distribution of the velocities and of the temperature is conservative with respect to the influence of the non-isothermal conditions. It is concluded that the results of the calculations can explain many of the published experimental data. Orig. art. has: 2 figures and 13 formulas.

SUB CODE: 20/ SUBM DATE: 01Dec64/ ORIG REF: 008/ OTH REF: 001

Cord 2/2

BALDIN, A.M., GOVORKOV, B.R.; DENISOV, S.P.; LEBEDEV, A.I.

Photoproduction of neutral pions near the threshold. IAd. fiz. 1 no.1:
92-95 Ja '65. (MIRA 18:7)

1. Fizicheskiy institut im. P.N.Lebedeva AN SSSR.

LEONT'YEV, A.I.

Accelerated method of diagnosing tularemia pathogens in the cadavers
of rodents. Zhur. mikrobiol., epid. i immun. 40 no.11:146 N '63.

(MIRA 17:12)

PORTNOV, A.A., kand. tekhn. nauk; KARPOV, A.A., inzh.; LEONT'YEV, A.I.,
inzh.; LEONT'YEVA, T.S., inzh.

Study of an experimental compartment furnace during the heating
of square billets. Stal' 25 no.4:370-372 Ap '65.

(MIRA 18:11)

KHUSID, S.Ye., inzh.; ZARZHITSKIY, Yu.A., inzh.; KULAKOV, A.M., inzh.;
KARPOV, A.A., inzh.; KROLENKO, N.A., inzh.; Prinimali uchastiyet
ALIMOV, B.V.; LEONT'YEV, A.I.; BOLOBOROV, N.M.; KARAGANOV, G.G.;
GUR'YANOV, V.N.; OSOKIN, G.F.; KAYZER, V.G.; DOROKOLETOV, A.M.;
ZLOBIN, V.K.; VIKTOROVA, T.Ye.; SEMENOV, V.A.; VODENNIKOV, V.F.;
SANIAYEV, I.K.

Operating a four-zone holding furnace on natural gas with auto-
matic control. Stal' 25 no.5:464-468 My '65.

(MIRA 18:6)

BRYLOV, D.A., dots.; LEONT'YEV, A.K., vetvrach

Efficient system of collecting and destroying animal carcasses.
Trudy AZVI 10:450-452 '57. (MIRA 12:8)

1. Iz kafedry zoogigiyeny (zav.kafedroy - dots. P.F.Romanov)
Alma-Atinskogo zoovetinstituta.
(Dead animals, Removal and disposal of)

LEONT'YEV, A.K. (Leningrad)

Design of an aerosol centrifuge. Izv.AN SSSR. Otd.tekh.nauk.Mekh.i
mashinostr. no.5:207-208 S-O '60. (MIRA 13:9)
(Aerosols) (Centrifuges)

10.2000

80273

S/170/60/003/02/03/026
B008/B005

AUTHORS: Gol'dshtik, M. A., Leont'yev, A. K., Paleyev, I. I.

TITLE: The Movement of Fine Particles¹ in a Turbulent Flow¹

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 2,
pp. 17-24

TEXT: An analytical method of integrating the equation of motion for the particles in a turbulence- or cyclone combustion chamber² or in a turbulence heater is suggested. The flow in the combustion chamber is divided into 2 zones in which the velocity equation is determined by the relations (1), (2), and (3): the zone of quasi-steady rotation near the axis in which the tangential velocity is distributed according to formula (1): $v_\varphi = \omega r$; $0 \leq r \leq r_0$; the zone of quasi-potential flow (2) $v_\varphi = \frac{c}{r}$; $r_0 \leq r \leq R$.

R = radius of the combustion chamber, where the relation $\omega r_0 = \frac{c}{r_0}$ holds.

Besides the peripheral velocity there is also a radial velocity component in the flow which is directed toward the rotational axis and is distributed

Card 1/3

The Movement of Fine Particles in a Turbulent Flow

80273
S/170/60/003/02/03/026
B008/B005

like the peripheral velocity, i.e. (3) $v_r = -\lambda r$ ($0 \leq r \leq r_0$); $v_r = -\frac{A}{r}$ ($r_0 \leq r \leq R$); $\lambda r_0 = \frac{A}{r_0}$. The equation of motion of the particle in the range $0 \leq r \leq r_0$ will look like this: (4) $\frac{dw}{d\tau} = -(\vec{w} - \vec{v}) - \Gamma \vec{g}$, (5) $\vec{w} = N \frac{d\vec{r}}{d\tau}$, and the relations (1), (2), and (3) will assume the following form: (6) $v_\varphi = r$ ($0 \leq r \leq 1$), $v_\varphi = \frac{1}{r}$ ($r \geq 1$); (7) $v_r = -M_r$ ($0 \leq r \leq 1$), $v_r = -\frac{M}{r}$ ($r \geq 1$). The designations are: $\alpha = \frac{18\mu g}{d^2 \gamma_T}$, $\Gamma = \frac{g}{\alpha v_0}$, $N = \frac{\alpha r_0}{v_0}$, $M = \frac{A}{r_0 v_0}$; $\vec{w}$, $\vec{v}$ = vectors

of the particle- and gas velocity; $\vec{g}$ = vector of the gravitational acceleration; t = time; $\vec{r}$ = radius vector indicating the position of the particle; μ = dynamic viscosity coefficient; d = particle diameter; γ_T = specific gravity of the particle; $\tau = \alpha t$ = nondimensional time. In the range $0 \leq r \leq 1$, equation (4) can be written down as follows:

$$\frac{d^2 z}{d\tau^2} + \frac{dz}{d\tau} + (M - 1) \frac{z}{N} = -\frac{\Gamma}{N} i \quad (8) \text{ where } z = x + iy \text{ is a complex coordinate}$$

of the particle. The character of the particle movement depends on the

Card 2/3

S/196/61/000/006/014/014

E194/E435

AUTHORS: Gol'shtik, M.A. Leont'yev, A.K., Paleyev, I.I.

TITLE: An experimental study of the motion of solid particles in a vortex chamber

PERIODICAL: Referativnyy zhurnal. Elektrotekhnika i energetika, 1961 No.6 p.11, abstract 6G67. (Nauchno-tekhn. inform. byul. Leningr. politekhn. inst. 1960. No.2. pp.81-89)

TEXT: Many works have been published on the motion of gas in cyclone furnaces and dust separators. However, there has apparently been no experimental work on the motion of solid or liquid particles in the gas flow of such chambers and the mechanism of motion of particles, particularly after impact with the chamber wall, remains unknown. Investigation of the motion of solid particles was carried out in a vortex chamber made up of four blades. Each of these was part of a cylindrical surface 600 mm long and of 210 mm radius. The chamber was 600 mm long and the mean diameter was 400 mm. The height of the gap was varied from 10 to 50 mm by turning the blades relative to their axis of rotation. In cross section the gap was convergent. The actual chamber was contained
Card 1/2

S/170/60/003/011/010/016
B019/B056

AUTHORS: Goldshtik, M. A. Leont'yev, A. K.
TITLE: The Rebound of a Sphere From a Solid Surface

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 11,
pp. 83-88

TEXT: It is assumed that a spherical particle rebounding from a wall moves under an angle of β^- and with the velocity w^- towards the surface thereby performing a rotation with the angular velocity ω^- . Using laws of mechanics, the rebound quantities β^+ , w^+ and ω^+ of the particle are calculated in consideration of the sliding at the instant of impact. In this derivation, the theorem of the conservation of the tangential velocity component of the center of mass is used. Experimental checking was carried out by means of sugar balls, whose diameter was 3 mm. They were dropped from a height of 3 m onto an inclined mirror, on which occasion they were illuminated and photographed. The white sugar balls had been colored with black ink on one side, so that a determination of the angular velocity after the impact was possible. The general theory for

Card 1/2

S/080/60/033/04/32/045

AUTHORS: Leont'yev, A.K., Pomerantsev, V.V.

TITLE: On the Low-Temperature Oxidation⁷ of Organic Materials¹

PERIODICAL: Zhurnal prikladnoy khimii, 1960, Vol 33, Nr 4, pp 940 - 946

TEXT: The low-temperature oxidation of some organic materials, like coal, starch and sugar, was investigated in the laboratory of the department of thermal physics of the Leningradskiy politekhnicheskii institut (Leningrad Polytechnical Institute). The aim of the work was the determination of the activation energy of the oxidation process within the temperature range of 40 - 140°C. The low-temperature oxidation of organic material is connected with its adsorbability and the desorption of the products of the reactions with the oxygen adsorbed. The sorption and desorption processes were investigated on Pechora coal, Donets gas coal, starch and beet sugar. The experimental data are analyzed on the basis of Roginskiy's theory of the sorption on non-homogeneous surfaces. It was shown that the grinding of coal affects mainly the rate of the initial adsorption of oxygen. An increase in the drying temperature has the same effect. Together with the oxygen adsorption the desorption process takes place. The principal desorption product is CO₂. Nitrogen is sorbed by coal at 40, 60

Card 1/2

On the Low-Temperature Oxidation of Organic Materials

S/080/60/033/04/32/045

and 80°C, then starts its desorption. At a temperature above 100°C the desorption of CO and CH₄ takes place. The activation energies of the sorption and desorption processes were determined in dependence on the amount of oxygen adsorbed from the gaseous phase. It was shown that the activation energy of desorption decreases with an increase in the oxygen amount adsorbed. There are: 9 graphs, 1 table and 1 Soviet reference.

ASSOCIATION: Leningradskiy politekhnicheskij institut imeni M.I. Kalinina (Leningrad Polytechnical Institute imeni M.I.Kalinin)

SUBMITTED: October 10, 1959

Card 2/2

LEONT'YEV, A. K., Cand Tech Sci -- (diss) "Research into the motion of heated material and heat conductors in whirlwind heated chambers." Leningrad, 1960. 12 pp; (Ministry of Higher and Secondary Specialist Education RSFSR, Leningrad Polytechnic Inst im M. I. Kalinin); 150 copies; price not given; (KL, 25-60, 132)

10 3500

26.5/100

27248
S/170/61/004/009/007/013
B104/B205

AUTHOR: Leont'yev, A. K.

TITLE: Minimum thickness of a heat-exchange wall heated by alternating current

PERIODICAL: Inzhenerno—fizicheskiy zhurnal, v. 4, no. 9, 1961, 67 - 72

TEXT: The author presents solutions of the heat-conduction equation for a thin wall and a hollow cylinder heated by alternating current. If the conditions formulated here are fulfilled, there will be no temperature variations of the heat exchange wall due to the varying direction of current. Resistivity, thermal conductivity, and specific heat are assumed to be independent of temperature. The heat conduction of the wall is

described by the equation $\partial\theta/\partial\tau = \partial^2\theta/\partial\xi^2 + (1 + \cos\tau)$ with the boundary conditions $(\partial\theta/\partial\xi)_{\xi=0} = 0$, $(\partial\theta/\partial\xi)_{\xi=\xi_0} = -B(\theta - \theta_0)$, where

$\theta_0 = 2\omega\lambda T/aq_v$; $\tau = 2\omega t$; $\xi = x\sqrt{2\omega/a}$; $B = \frac{a}{\lambda}\sqrt{a/2\omega}$; q_v is the effective calorific power per unit volume; θ_0 is the non-dimensional temperature of

Card 1/3

27248

S/170/61/004/009/007/013
B104/B205

Minimum thickness of a

the cooling medium. The solution is sought as the sum of two functions:
 $\theta = \theta(\xi, \tau) + \varphi(\xi)$. $\varphi(\xi)$ is the solution of the equation $\varphi'' + 1 = 0$, and
 $\theta(\xi, \tau)$ is determined from the equation $\partial^2 \theta / \partial \xi^2 = \partial \theta / \partial \tau - \cos \tau$. In solving
the heat-conduction problem of a hollow cylinder, the author proceeds from
the equation $\frac{\partial \theta}{\partial \tau} = \frac{1}{\rho} \frac{\partial}{\partial \rho} \rho \frac{\partial \theta}{\partial \rho} + (1 + \cos \tau) \Big|_{\rho=\rho_1} \frac{\partial \theta}{\partial \rho} - B_1 \theta \Big|_{\rho=\rho_1} = B_1 \theta_1$;
 $\Big|_{\rho=\rho_2} \frac{\partial \theta}{\partial \rho} + B_2 \theta \Big|_{\rho=\rho_2} = B_2 \theta_2$. Here, $\rho = r\sqrt{2\omega/a}$; B_1 and B_2 are the inner and

the outer cylinder surface, respectively. The solution is again sought as
the sum of two functions: $\theta = \theta(\rho, \tau) + \varphi(\tau)$. Here, $\varphi(\rho)$ is the solution
to the equation

$\frac{1}{\rho} \frac{d}{d\rho} \rho \frac{d\varphi}{d\rho} + 1 = 0$, and θ is determined from the equation $\frac{1}{\rho} \frac{\partial}{\partial \rho} \rho \frac{\partial \theta}{\partial \rho}$

$= \frac{\partial \theta}{\partial \tau} - \cos \tau$. The author comes to the conclusion that the minimum thick-
ness above which temperature is no longer changed by alternating current,
can be estimated using the relation :

Card 2/3

27553
S/170/61/004/010/013/019
B108/B102

26.5100

AUTHOR: Leont'yev, A. K.

TITLE: Influence of the thermal skin effect upon the temperature distribution in a current-heated cylindrical conductor

PERIODICAL: Inzhenerno-fizicheskii zhurnal, v. 4, no. 10, 1961, 101-103

TEXT: The temperature distribution in an infinitely long hollow conducting cylinder which is cooled internally and d-c heated is given by the formula

$$t = t_0 - \frac{q_v(d_0^2 - d^2)}{16\lambda} \left[\frac{2 \ln d_0/d}{1 - (d/d_0)^2} - 1 \right] \quad (1). \quad \text{This formula holds for}$$

$\lambda, \rho = \text{const.}$ t_0 denotes the temperature of the outer adiabatic surface of the cylinder, d_0 is its diameter, λ - thermal conductivity, q_v - heat delivery per unit volume. The heat conduction equation is solved for the case where $\lambda = \text{const}$ and the resistivity ρ is a function of temperature. The heat-conduction equation is written in the form

Card 1/4

27558
S/170/61/004/010/013/019

Influence of the thermal skin effect upon... B108/B102 4

$$\frac{1}{r} \frac{d}{dr} \left(r \frac{dt}{dr} \right) + \frac{q_v}{\lambda} \frac{\rho}{\bar{\rho}} = 0 \quad (2). \quad q_v = \frac{0.864 I V}{4(d_o^2 - d_{\infty}^2)}. \quad I \text{ denotes the mean}$$

amperage, V the potential drop per unit length, d_{∞} the inner width of the conductor, $\bar{\rho}$ the mean resistivity. The resistivity ratio is expanded into a series: $\rho/\bar{\rho} = 1 + \kappa_1(t - t_{\rho}) + \kappa_2(t - t_{\rho})^2 + \dots$, where $\kappa_1 = \frac{1}{\bar{\rho}} \frac{d\rho}{dt}$

and t_{ρ} is the temperature at which the resistivity equals $\bar{\rho}$. When the temperature difference $(t - t_{\rho})$ is small, it may be assumed that $\rho/\bar{\rho} \approx 1 - \kappa_1(t - t_{\rho})$ (3). With the boundary conditions

$$t = t_o \text{ at } r = d_o/2, \quad \left(\frac{dt}{dr} \right) = - \frac{\alpha_o}{\lambda} (t_o - t_{\rho}) \text{ and with the substitution (3),}$$

the heat conduction equation for small $(t - t_{\rho})$:

$$\frac{1}{r} \frac{d}{dr} \left(r \frac{dt}{dr} \right) + \frac{q_v}{\lambda} [1 - \kappa_1(t - t_{\rho})] = 0 \quad (4) \text{ has the following solution:}$$

Card 2/4

27558

S/170/61/004/010/013/019

Influence of the thermal skin effect upon... B108/B102

$$t = t_0 - \left(t_f + \frac{1}{x_1} - t_0 \right) [A I_0(md/d_0) + B K_0(md/d_0) - 1],$$

$$m = \sqrt{q_0 d_0^2 x_1 / 4 \lambda};$$

(6).

$$A = \frac{K_1(m) - Bi \frac{t_0 - t_c}{t_0 - (t_f + 1/x_1)} K_0(m)}{K_1(m) I_0(m) + K_0(m) I_1(m)};$$

$$B = \frac{I_1(m) + Bi \frac{t_0 - t_c}{t_0 - (t_f + 1/x_1)} I_0(m)}{K_1(m) I_0(m) + K_0(m) I_1(m)};$$

I_0, K_0, I_1, K_1 are first and second-kind Bessel functions (imaginary argument) of zeroth and first order, respectively. When no heat is removed from the outer surface, i. e., when $Bi = 0$, the temperature distribution is given by

$$t = t_0 - \left(t_f + \frac{1}{x_1} - t_0 \right) \left[\frac{K_1(m) I_0(md/d_0) + I_1(m) K_0(md/d_0)}{K_1(m) I_0(m) + I_1(m) K_0(m)} - 1 \right] \quad (6').$$

Card 3/4

Influence of the thermal skin effect upon...²⁷⁵⁵⁸
S/170/61/004/010/013/019
B108/B102

For $d = d_{\text{c}}$ the temperature of the cooled inner surface can be determined from Eqs. (6) or (6'). When λ depends on temperature it has to be replaced by a λ determined at the arithmetic average of temperature. There is 1 Soviet reference.

ASSOCIATION: Institut prikladnoy khimii, g. Leningrad (Institute of Applied Chemistry, Leningrad)

SUBMITTED: January 12, 1961

Card 4/4

LEONT'YEV, A.K., kand.tekhn.nauk

Effect of the concentration of the solid phase on the flow of
gas in a vortex chamber. Teploenergetika 9 no.5:25-28 May '62.
(MIRA 15:4)

1. Leningradskiy institut prikladnoy khimii.
(Gas flow)

S/170/62/005/007/007/010
B104/B112

AUTHOR: Leont'yev, A. K.

TITLE: A simple method of determining the temperature of a heat-transfer surface

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, v. 5, no. 7, 1962, 78-82

TEXT: The temperature of a material determined from the given temperature dependence of its resistivity is set equal to the temperature averaged over the cross section of the specimen in question. Formulas describing the temperature of a heat-transfer surface as a function of the temperature averaged over the cross section are derived for a flat wall, a solid cylinder, and also for internally and externally cooled hollow cylinders. The resulting formulas make it possible to calculate the surface temperature from measurements of the electrical resistance. The experimental difficulties and errors encountered in direct measurements of surface temperatures using thermocouples can thus be avoided. ✓

Card 1/2

A simple method of determining the ...

S/170/62/005/007/007/010
B104/B112

ASSOCIATION: Institut prikladnoy khimii, g. Leningrad
(Institute of Applied Chemistry, Leningrad)

SUBMITTED: January 4, 1962



Card 2/2

LEONT'YEV, A.K.

Steady-state temperature distribution in a flat wall heated
by electric current. Inzh.-fiz.zhur. 5 no.8:106-107 Ag '62.
(MIRA 15:11)

1. Institut prikladnoy khimii, Leningrad.
(Heat-Conduction)

L 62184-65 EPF(n)-2/EPR/EPA(e)-2/LWG(v)/EWT(1)/EWA(1) Pe-5/Pe-4/Pt-7/Pu-4

ACCESSION NR: AP5010467 WW UR/0294/65/003/002/0266/0271
536.12.001

39
38
B

AUTHOR: Leont'yev, A. K.

TITLE: Distribution of temperature in heat-releasing elements heated with electric current; whose thermal and electric conductivities depend on the temperature

SOURCE: Teplofizika vysokikh temperatur, v. 3, no. 2, 1965, 266-271

TOPIC TAGS: heating element, heat release, temperature distribution, temperature dependence, thermal conductivity, electric conductivity, electric heating

21

ABSTRACT: Formulas are derived for the calculation of the distribution of temperature in heat-releasing elements heated with electric current. It is claimed that the presently employed formulas for this purpose have been derived under the assumption that the heat released is constant over the cross section of the element, so that no account is taken of the temperature dependence of the electric conductivity

Card 1/3

L 62184-65

ACCESSION NR: AP5010467

makes the current density variable over the cross section (thermal skin effect), and this changes the amount of heat released over the cross section. In the present article the author solves the equations of thermal conductivity for a flat wall and for a hollow cylinder, assuming that the coefficients of heat conductivity and electric conductivity are linearly dependent on the temperature. Only one-dimensional problems are considered, without allowance for the thermal expansion of the heating element, and under the assumption that a stationary mode has already been established. The hollow cylinder is assumed to be cooled from the inside. An analysis of the numerical example shows that the error in the determination of the temperature amounts to 5 per cent and that in the determination of the heat exchange coefficient amounts to 6.5 per cent. Original article has: 31 formulas

ASSOCIATION: Gosudarstvennyy institut prikladnoy khimii (State Institute of Applied Chemistry)

Card 2/3

L 62184-65

ACCESSION NR: AP5010467

0

SUBMITTED: 12May64

ENCL: 00

SUB CODE: EE, TD

NR REF SOV: 004

OTHER: 000

lip
Card

3/3

GLADKIY, M.F.; CHETVERGOV, Ye.V.; LEONT'YEV, A.L., kand. sel'skokhoz. nauk

Pay attention to sweet clover. Zemledelie 27 no.4:62-64 Ap '65.
(MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut kormov (for Gladkiy). 2. Glavnyy agronom sovkhoza "Mamalayevskiy" Mordovskoy ASSR (for Chetvergov).

LEONT'YEV, A. L.

USSR / Cultivated Plants. Grains.

M-3

Abs Jour: Ref Zhur-Biol., 1958, No 16, 72889.

Author : Leont'yev, A. L.

Inst : Not given.

Title : Spring Wheat Preceeding Crops.

Orig Pub: Zemledeliye, 1958, No 2, 93.

Abstract: Results of a 3 year study of the influence of preceeding crops (silo corn, sunflower for seed, potatoes, millet, seed peas, barley, vetch-oat hay mixture, sainfoin-bromegrass mixture, spring wheat and pure fallow) on the harvest of wheat in the Ul'yanovskaya Agricultural Experimental Station. The highest harvest of soft and hard wheat is obtained with corn, then peas for seed and a vetch-oat hay mixture. -- A. F. Khlystova.

Card 1/1

21

POLYAKOV, Yu.A.; LEONT'YEV, A.M.; MEL'NIKOV, L.K.

Concerning Sr⁹⁰ fallout in the middle latitudes of the U.S.S.R.
Pochvovedenie no. 11:45-50 N '62. (MIRA 16:1)
(Radioactive fallout) (Strontium--Isotopes)

LEONT'YEV, A. M.

Leont'yev, A. M. - "The basic laws of the distribution of the plants of the Mologo-Sheksnin inter-river region for the formation of the Rybin watershed", Trudy Darvinskogo gos. zapovednika na Rybin. vodokhranilishche, Issue 1, 1949, p. 9-32, - Bibliog: 26 items.

SO: U-411, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 20, 1949).

LEONT'YEV, A. M.

Leont'yev, A. M. - "Desert short-grass and sedge meadows of the Mologo-Sheksnin inter-river region for the formation of the Rybin watershed", Trudy Darvinskogo gos. zapovednika na Rybin. vodokhranilishche, Issue 1, 1949, p. 33-136, - Bibliog: 13 items.

SO: U-411, 17 July 53, (Letopis 'Zhurnal 'nykh Statey, No. 20, 1949).

LEONT'YEV, A.M.

36356 Plodonosheniye sibirskoy yeli na verkhney pechore. Nauch-metod. Zapiski
(Sovet ministrov refer, Glav. upr. po zapovednikam.) Vyp. 12, 1949, S. 74-78

SO: Letopis' Zhurnal' nykh Statey, No. 49, 1949

LEONT'YEV, A.M., kand. biolog. nauk

Cultivation of the canary grass *Phalaris arundinacea* L. Biol. v
shkole no.4:69-70 J1-Ag '59. (MIRA 12:11)

1. Darvinskiy gosudarstvennyy zapovednik, Kalininskaya oblast',
Ves'rebonskiy rayon.
(Canary grass)

USPENSKAYA, A.A.; LEONT'YEV, A.M.

Soils of fields and meadows in the Darwin Preserve. Trudy DGZ
no.7:7-69 '61. (MIRA 16:2)

(Darwin Preserve--Soils--Analysis)
(Darwin Preserve--Soil fertility)

POLYAKOV, Yu.A.; KUTOVA, T.N.; LEONT'YEV, A.M.; SERGACHEVA, I.A.

Radioactivity of plants in the Darwin State Preserve; data for
1958-1959. Trudy DGZ no.7:147-173 '61. (MIRA 16:2)
(Darwin Preserve--Plants--Chemical analysis)

LEONT'YEV, A.M., kand.biologicheskikh nauk, starshiy nauchnyy
sotrudnik

Value of reed canary grass. Zhivotnovodstvo 23 no.8:66-67
Ag '61. (MIRA 16:2)

1. Darvinskiy gosudarstvennyy zapovednik.
(Reed canary grass as feed)

LEONT'YEV, A.N., otv. red.; ZINCHENKO, V.F., red.; PANO' D.Yu.,
red.; NAZAROV, A.I., red.

[Engineering psychology] Inzhenernaia psikhologiya. Mo-
skva, Izd-vo Mosk. univ., 1964. 395 p. (MIRA 18:3)

LEONT'YEV, A.N.; BOYKO, T.F.

Greisenized granite bosses in the ^Altai. Trudy Inst. min., geokhim.
i kristallokhim. red. elem. no. 3:180-194 '59. (MIRA 14:5)
(Altai Mountains—Granite) (Greisen)

LEONT'YEV, A.N.

Some features of the geological position of rare-metal granites
in the Altai Mountains. Trudy IMGRE no.5:99-117 '61.

(MIRA 15:7)

(Altai Mountains—Granite)

(Altai Mountains—Metals, Rare and minor)

LEONT'YEV, A.N.; VOLOCHKOVICH, K.L.

Characteristics of the spatial distribution of pegmatite deposits
in the Mongolian Altai anticlinorium. Trudy IMGRE no.8:5-19 '62.

(MIRA 16:1)

(Altai Mountains--Pegmatites)

(Altai Mountains--Metals, Rare and minor)

VOLOCHKOVICH, K.L.; LEONT'YEV, A.N.

Distribution of areas with Paleozoic magmatic features
in the structure of the Talitsa-Mongolo-Altaic geoclinical
upheaval. Dokl. AN SSSR 147 no.1:177-180 N '62. (MIRA 15:11)

1. Institut mineralogii, geokhimii i kristalloghimii
redkikh elementov. Predstavleno akademikom D.I. Shcherbakovym.
(Altai Mountains—Rocks, Igneous)

LEONT'YEV, A.N.

Pegmatite-localizing structures and zoning of a rare-metal
pegmatite field (factors of ore zoning). Trudy IMGRE no.16:
5-26 '63. (MIRA 16:8)

КАРАПОВ, В. В.; АЛЕКСАНДРОВСКИЙ, А. А.; ЛЕОНТЬЕВ, А. Е.

"Hydrodynamics and mass transfer in rotating equipment."

report submitted for 2nd All-Union Conf on Heat & Mass Transfer, Minsk, 4-12
May 1964.

Kazan' Chemical Technology Inst.

LEONT'YEV, A.N.

Ecology of the sharp-clawed gerbil (*Meriones unguiculatus*) in
Buryat-Mongolia. Izv. Irk.gos.protivochum. inst. 12:137-149 '54.
(BURYAT-MONGOLIA--GERBILS) (MIRA 10:12)

OL'KHOVİK, Ye.Ya.; LEONT'YEV, A.N.; SHVEDKO, L.P.

~~Dermacenter nuttalli~~ as a carrier of tularemia. Tez. i dokl.konf.
Irk.gos.nauchn.-issl.protivochum.inst. no.2:46 '57. (MIRA 11:3)
(TICKS AS CARRIERS OF DISEASE) (TULAREMIA)

TIMOFEYEVA, L.A.; ZHOVTYY, I.F.; NEKIPLOV, N.V.; BUSOYEDOVA, N.M.;
GOLOVACHEVA, V.Ya.; DUBOVIK, I.M.; DUBOVIK, V.I.; ZHIVOLYAPINA,
R.R.; LEONT'YEV, A.N.; PETUKHOVA, O.I.; TIMOFEYKHA, A.A.; SHEVDEKO, L.P.

Search for plague and other epizootic diseases in Transbaikalian
plague focus. Report No.2. Izv.Irk.gos.nauch.-issl.protivochn.
1957. 15:3-17 '57. (MIRA 13:7)

(TRANSBAIKALIA--RODENTIA--DISEASES AND PESTS)

LEONT'YEV, A.N.; VOROTNIKOVA, L.M.

Determination of the age of the long-tailed suslik (*Citellus undulatus* Pall). Izv.Irk.gos.nauch.-issl.prirodoveden.i inst.
16:60-68 '57. (MIRA 13:7)
(SUSLIKS)

LEONT'YEV, A.N.

Diurnal activity of the Mongolian gerbil and Brandt's field
mouse. Izv.Irk.gos.nauch.-issl.prirodochum.inst. 16:78-84

'57.

(MIRA 13:7)

(SOLOV'YEVSK--ANIMALS, HABITS AND BEHAVIOR OF)

(FIELD MICE)

(GERBILS)

LEONT'YEV, A.N.

Biology of the Daurian hedgehog. Izv.Irk.gosn.nauch.-issl.
protivochum.inst. 16:154-155 '57. (MIRA 13:7)
(BURIAT-MONGOLIA--HEDGEHOGS)

LEONT'YEV, A.N.; KHAMAGANOV, S.A.

Poisoned bait in the control of the Mongolian gerbil in south-eastern Transbaikalia. Izv.Irk.gos.nauch.-issl.protivochum.inst. 16:232-238 '57. (MIRA 13:7)

(TRANSBAIKALIA--GERBILS)

(RODENT BAIT AND REPELLENTS)

LEONT'YEV, A.N.

Reproduction of the long-tailed suslik. Izv.Irk.gos.nauch.-
issl.protivochum.inst. 19:123-128 '58. (MIRA 13:7)
(Kiakhta District(Buryat-mongolia)--Susliks)

LEONT'YEV, A.N.; KHAMAGANOV, S.A.

Extermination of Brandt's field vole with poisoned grain.
Izv.Irk.gos.nauch.-issl.protivochum.inst. 19:152-156
'58. (MIRA 13:7)

(Rodent baits and repellants)
(Field mice)

SOLODKAYA, A.D.; GOLOSOVA, Z.N.; OL'KHOVIK, Ye.Ya.; SHVEDKO, L.P.;
LEONT'YEV, A.N.

Tularemia in the Nerchinsk District of Chita Province. Izv.Irk.
gos.nauch.-issl.protivochum.inst. 20:147-152 '59.

(MIRA 13:?)

(NERCHINSK DISTRICT (CHITA PROVINCE)--TULAREMIA)

LEONT'YEV, A.N.; PAVLOV, Ye.I.

Ornithological observations in the Chikoy Valley (Chita
Province). Ornitologiya no.6:165-172 '63. (MIRA 17:6)

LEONT'YEV, A.N.

Coordination forms of metallogenetic and ore zoning in the Altai.

Dokl. AN SSSR 163 no.6:1448-1451 Ag '65.

(MIRA 18:8)

1. Institut mineralogi, geokhimi i kristalloghimi redkikh elementov
AN SSSR. Submitted February 2, 1965.

VOLOCHKOVICH, Kirill L'vovich; LEONT'YEV, Anatoliy Nikolayevich;
LEONT'YEV, L.N., doktor geol.-miner. nauk, otv. red.

[Talitsa-Mongolian-Altai metallogenic zone] Talitsko-
Mongolo-Altaiskaia metallogenicheskaiia zona. Moskva,
Nauka, 1964. 181 p. (MIRA 17:12)

LEONT'YEV, A.M.

LEONT'YEV, A.M., 1949.

USFR

"Outline of the Development of Psychology".

Current Digest of the Soviet Press, Vol. 1 No. 1, 1949, page, 30 (In ~~the~~ Library)

LEONT'EV, Alekseĭ Nikolaevich, 1903-

Mental development of children; lectures. Moskva, Pravda. 1950. 29 p. (53-22824)

LB1117.L38

LEONT'YEV, A.N.

! SOKOLOV, Ye.N.; LEONT'YEV, A.N., redaktor.

[Brain and psyche; material for lectures] Mozg i psikhika; material
k lektsii [Nauch. redaktor A.N.Leont'ev] Moskva, Gos. izd-vo kul'-
turno-prosvetitel'noi lit-ry. 1952. 57 p. (Biblioteka v pomoshch'
lektoru, No.22) (MLRA 7:3)

(Brain) (Psychology, Physiological)

LEONT'YEV, A. N.

"Results of the Experimental Investigation of Thinking," collect. Lectures of the Conference on the Problems of Psychology, 3-8 July 1953, Moscow, published by Acad. Pedagogical Sci. USSR, 1954.

LEONT'YEV, A. N. (Prof.)

"Formation and Nature of the Psychic Properties and Processes of Man,"

Communications at the XIV International Congress of Psychology, Acad. Pedagogical
Sci. RSFSR, Moscow, 1954.

Prof. A. N. Leont'yev, Chair Psychology, Moscow University.

LEONT'YEV, A.N., red.; GUR'YANOV, Ye.V., red.; OSHANIN, D.A., red.

[Summaries of papers to a conference on problems in industrial psychology] Tezisy dokladov Soveshchaniia po voprosam psikhologii truda. Moskva, Izd-vo Akad. pedagog. nauk RSFSR, 1957. 63 p.
(MIRA 14:8)

1. Soveshchaniye po voprosam psikhologii truda.
(Manual training) (Work measurement)

LEONT'YEV, A.N.

Instruction as a psychological problem. Vop.psikhol. 3 no.1:3-17
Ja-F '57. (MLRA 10:3)

1. Kafedra psikhologii Moskovskogo universiteta.
(Educational psychology)

VORONIN, L.G., red.; LEONT'YEV, A.N., red.; LURIYA, A.R., red.; SOKOLOV, Ye.N., red.; VINOGRADOVA, O.S., red.; GOLUBEVA, E.A., red.; TARASOVA, V.V., tekhn.red.

[Orientation reflex and exploratory behavior] Orientirovochnyi refleks i orientirovochno-issledovatel'skaia deiatel'nost'. Moskva, Izd-vo Akad.pedagog.nauk RSFSR, 1958. 350 p. (MIRA 12:2)

1. Akademiya pedagogicheskikh nauk RSFSR, Moscow. 2. Moskovskiy gosudarstvennyy universitet, Institut defektologii Akademii pedagogicheskikh nauk RSFSR (for Sokolov). 3. Institut defektologii Akademii pedagogicheskikh nauk RSFSR, Moskva (for Vinogradova).
(REFLEXES) (ORIENTATION)

LEONT'YEV, Aleksey Nikolayevich; PONOMAREV, Ya.A., red.; TARASOVA, V.V.,
tekhn.red.

[Problems of mental development] Problemy razvitiia psikhiki.
Moskva, Izd-vo Akad.pedagog.nauk RSFSR, 1959. 493 p.
(MIRA 13:1)

(Senses and sensation) (Intellect)
(Child study)

ANAN'YEV, B.G., red.; KOSTYUK, G.S., red.; LEONT'YEV, A.N., red.; LURIYA, A.R., red.; MENCHINSKAYA, N.A., red.; RUBINSHTEYN, S.L., red.; SMIRNOV, A.A., red.; TEPLOV, B.M., red.; SHERYAKIN, F.N., red.; ZHUKOV, I.V., red.; PONOMAREV, Ya.A., red.; MATYUSHKIN, A.M., red.; LAUT, V.G., tekhn.red.

[Psychology in the U.S.S.R.] Psikhologicheskaya nauka v SSSR.
Moskva, Vol.1. 1959. 597 p. (MIRA 12:8)

1. Akademiya pedagogicheskikh nauk RSFSR, Moscow. Institut
psikhologii.

(Psychology)

LEONT'YEV, A.N. (Moskva); GAL'PERIN, P.Ya. (Moskva); EL'KONIN, D.B.
(Moskva)

School reform and tasks in psychology. Vop.psikhol. 5 no.1:3-22
Ja-F '59. (MIRA 12:4)
(Educational psychology)

LEONT'YEV, A. N.

Mechanism of sensory reflection. Vop.psikhol. 5 no.2:19-41
Mr-Apr '59. (MIRA 12:6)

1. Kafedra psikhologii Moskovskogo universiteta.
(Senses and sensation)

LEONT'YEV, A.N.

Belokurikha Massif and rare metal mineralization connected
with it. Krat. soob. IMGRE no.1:16-21 '60.
(MIRA 17:3)

LEONT'YEV, A.N.

Biological and social elements in human mentality. Vop.
psikhol. 6 no. 6:23-38 N-D '60. (MIRA 13:12)

1. Kafedra psikhologii Moskovskogo universiteta.
(Hearing) (Man--Influence of environment)
(Intellect)

LEONT'YEV, A.N.; KRINCHIK, Ye.P.

Use of information theory in concrete psychological studies;
contemporary studies on choice reaction. Vop. psikh. 7 no.5:
25-46 8-0 '60. (MIRA 15:1)

1. Otdeleniye psikhologii Moskovskogo universiteta.
(INFORMATION THEORY IN PSYCHOLOGY) (CHOICE (PSYCHOLOGY))

LEONTYEV, A.N. [Leont'yev, A.N.]

Biological and social factors in the psychical processes of man.
Magy pszichol szemle 18 no.2:137-152 '61.

1. Lomonosov Egyetem, Moszkva.

RUBINSHTEYN, S.L.; SOKOLOV, A.N.; LURIYA, A.R.; LEONT'YEV, A.N.; SMIRNOV, A.A.; GONOBOLIN, F.N.; MENCHINSKAYA, N.A.; ZHINKIN, N.I.;
IGNAT'YEV, Ye.N.; EL'KONIN, D.E.; GUREVICH, K.M.; GUR'YANOV, Ye.V.;
LEYTES, N.S.; KRUTETSKIY, V.A. Iznimaniya uchastiye: POLYAKOV, G.I.;
SHEMYAKIN, F.N.; TEPOV, B.M., red.; VVEDETSKAYA, L.A., red.;
DRANNIKOVA, M.S., tekhn. red.

[Psychology]Psikhologiya; uchebnik dlia pedagogicheskikh institutov.
Pod red. A.A.Smirnova i dr. Izd.2. Moskva, Uchpedgiz, 1962. 558 p.

1. Akademiya pedagogicheskikh nauk RSFSR, Moscow. In-
stitut psikhologii. (MIRA 15:11)

(PSYCHOLOGY)

S/245/62/000/006/002/006
D222/D307

AUTHORS: Leont'yev, A. N. and Krinchik, Ye. P.

TITLE: Some features of the processing of information by a human operator

PERIODICAL: Voprosy psikhologii, no. 6, 1962, 14-25

TEXT: The present report of experiments in which the relationship between the choice reaction time and the amount of information received was investigated, was aimed at studying the psychological structure and properties of the information-handling processes in addition to deriving purely quantitative data. Such an approach may give an insight into the reasons for the great differences found in channel capacities measured under different conditions. Most experiments so far have dealt with only the average information

$$H = - \sum_{i=1}^n p_i \log p_i \quad (2)$$

Card 1/2

Some features of the ...

S/245/62/000/006/002/006
D222/D307

where p_i are the probabilities of the signals. The information content of an individual signal is defined as $I = -\log P$. In the first series of experiments the dependences of the reaction time T on the average (H) and individual (I) information received were compared. The results confirm that the reaction time is a linear function of the average information, but varies according to a logarithmic law when plotted against individual information. These differences are explained in terms of a division of attention between rare and frequent signals. In the second series of experiments the influence of 'signal importance' was studied by giving special significance to one of the two signals. It was found that this increases the speed of information processing and both the reaction time and the slope of the regression line $T = a + bH$ are reduced, the slope reduction sometimes amounting to a factor of 0.5. There are 4 figures.

ASSOCIATION: Otdeleniye psikhologii Moskovskogo universiteta (Moscow University, Department of Psychology)

Card 2/2

LEONT'YEV, A.N.; LOMOV, B.F.

Man and technology. Vop. psikhol. 9 no.5:29-37 S-0'63.
(MIRA 17:2)

1. Moskovskiy gosudarstvennyy universitet (for Leont'yev).
2. Leningradskiy gosudarstvennyy universitet (for Lomov).

LEONT'YEV, A. N. → KRINCHIK, Ye. P.

"O vliyanií znachivosti signala na skorost' pererabotki informatsii chelovekom."

report submitted for 15th Intl Cong, Intl Assn of Applied Psychology, Ljubljana, Yugoslavia, 2-8 Aug 1964.

Moskovskiy universitet.

L 55156-65

ENT(d)/ENP(c)/ENP(v)/ENP(k)/ENP(h)/ENP(1) PF-4

ACCESSION NR AM5014985

BOOK EXPLOITATION

UR/

Leont'yev, Aleksey Nikolaysvich, ed.

Engineering psychology (Inzhenernaya psikhologiya), Moscow, (Izd-vo Mosk. univ.), 1964, 395 p. illus., biblio. 2,500 copies printed (At head of title: Moskovskiy gosudarstvennyy universitet im. M.V.Lomonosova i Gosudarstvennyy komitet po radioelektronike SSSR)

TOPIC TAGS: psychology, information theory, information processing, industrial medicine, mechanical engineering, civil engineering

PURPOSE AND COVERAGE: The book, which contains a collection of articles by psychologists, psychophysicists, and engineers, presents the basic concepts of engineering psychology. The book has been compiled primarily as an introduction to theoretical research in engineering psychology. The first section describes the conceptual models and research methods used in the field. The chapters in the second section are devoted to diverse theoretical questions which define the present perspective of engineering psychology. The book also contains the results of some original experimentation published here in full for the first time.

Card 1/3

L 55156-65

ACCESSION NR AM5014985

TABLE OF CONTENTS:

Foreword-- 5

PART I

Ch. I. Problems of engineering psychology -- 5

Ch. II. General definitions of information theory and their application in psychology and psychophysiology -- 24

Ch. III. Statistical analysis of perception processes -- 42

Ch. IV. Qualitative methods for analyzing perception of space and time-space relationships -- 52

Ch. V. Statistical model of the free response observer -- 68

Ch. VI. Methods and systems for the automatic analysis of brain potential -- 105

PART II.

Ch. VII. Analysis of the activity of a man-operator¹⁴ -- 120

Ch. VIII. Psychophysiological characteristics of hearing -- 138

Ch. IX. Psychophysiological characteristics of sight -- 159

Ch. X. Results of experiments on the operation of the observer's visual perception system -- 192

Ch. XI. Theoretical problems in the psychology of perception -- 231

Ch. XII. Problems in the psychology of memory and information theory -- 264

Card 2/3

L 55156-65

ACCESSION NR AM5014985

- Ch. XIII. Human processing of information in a decision making situation -- 295
Ch. XIV. A study of habits and sensory motor reactions -- 326
Ch. XV. The "interference stability" of the operator -- 340
Ch. XVI. Reliability of the operator in a complex control system -- 358
Ch. XVII. The accuracy of the operator's work and the index of error -- 368
Ch. XVIII. The question of the stability of the operator's work in a control system -- 381
Ch. XIX. Psychological questions concerning choice -- 387

SUBMITTED: 10Oct64

SUB CODE: PH, LS

NO REF SOV: 241

OTHER: 354

Card 3/3

LEONT'YEV, A.N.

Winter ornithofauna of the Yamarovka region. Ornitologiya no. 7: 478-
479 '65. (MIRA 18:10)

SHCHERBINA, N.A.; LEONT'YEV, A.P.

Production of hyperfine tin plate. Biul.tekh.-ekon.inform.Gos.
nauch.-issl.inst.nauch.i tekh.inform. 17 no.1:97-100 '64.

(MIRA 17:2)

LEONT'YEV, Andrey Pavlovich; L'VITSYN, N.F., redaktor; KHITOV, P.A.,
tekhnicheskii redaktor.

[Transporting perishable goods on railroads] Perevoski skoro-
portiaschikhsia grusov na zheleznykh dorogakh. Moskva, Gos.transp.
shel-dor. izd-vo, 1955. 134 p. (MLRA8:11)
(Refrigerator cars)

LEONT'YEV, A.P., inzhener; KHANDROS, G.M., inzhener.

Shortcomings in utilizing carload capacity and ways of eliminating
them. Zhel.dor.transp.39 no.1:38-41 Ja '57. (MLBA 10:2)
(Railroads--Management)

LEONT'YEV, A.P., insh.

Methods for increasing static loading of cars. Zhel.dor.transp.
40 no.11:70-74 N '58. (MIRA 11:12)
(Railroads--Freight cars) (Loading and unloading)

LEONT'YEV, Andrey Pavlovich, inzh.; TIKHONCHUK, Yuriy Nikolayevich,
kand.ekonom.nauk; GRISHCHENKOV, A.S., red.; VERINA, G.P., tekhn.red.

[Loading freight cars to their full capacity] Ispol'sovanie
gruzopod'emnosti vagonov. Moskva, Gos.transp.shel-dor.isd-vo,
1959. 265 p. (MIRA 12:6)
(Railroads--Freight cars) (Loading and unloading)

SIZYKH, Glafira Ivanovna; GAVRILOVA, Yuliya Pavlovna; LEONT'YEV, Andrey Pavlovich; CHARNICHKOV, Viktor Stepanovich; KHANDROS, Gersh Moshkovich; PODTSUYEVA, Lidiya Mikhaylovna; YANKIN, Sergey Mikhaylovich; GITKOVICH, V.K., inzh., red.; MEDVEDEVA, M.A., tekhn. red.

[Advanced work methods for workers engaged in freight operations] Peredovye metody truda rabotnikov gruzovogo khoziaistva. Moskva, Vses. izdatel'sko-poligr. ob"edinenie M-va vntei soobshcheniia, 1961. 91 p. (MIRA 15:3)
(Materials handling) (Railroads--Freight)

LEONT'YEV, A.P.; LYUBAN, E.I.; PUSTOVOYT, P.T.; REZER, S.M.,
inzh., retsenzent; ERLIKH, M.D., inzh., red.;
VOROB'YEVA, L.V., tekhn. red.

[Manual on freight transportation in containers] Spravochnik po konteinerным perevozкам. Moskva, Izd-vo "Transport,"
1964. 263 p. (MIRA 17:3)

LEONT'YEV, A.P.

Improve the transportation of perishable goods. Zhel. dor. transp.
46 no.9:56-59 S '64.

1. Zamestitel' nachal'nika otдела Glavnogo gruzovogo upravleniya.

LEONT'YEV, A.I.

Improve the transportation of combustible goods. Shel. ... transp. 46
no. 9:56-59 S 164. (MIRA 17:19)

1. Zamestotel' nach ... v ... upravleniya.

2 LEONT'YEV, A.S.
LEONT'YEV, A.S.

Sailors working on the Volga and Kama Rivers were active participants in the defeat of the White Army during the civil war years. Rech.transp. 16 no.10:42-44 0 '57.

(MIRA 10:12)

(Russia--Revolution, 1917-1921)

LEVITIN, Isidor Borisovich; LEONT'YEV, Aleksandr Sergeyevich;
MESHKOV, V.V., doktor tekhn. nauk, retsentsent; BARSHAY,
M.M., inzh., retsentsent; DUBOVIK, V.A., nauchnyy red.;
GOLUBEVA, N.P., red.; FRUMKIN, P.S., tekhn. red.

[Lighting engineering on ships] Sudovaya svetotekhnika.
Leningrad, Sudpromgiz, 1963. 300 p. (MIRA 16:5)
(Electric lighting of ships)

[illegible]

Deposition of subcellular fractions for the purification of
various ribonucleoprotein cores. *Expt. 1* (table 1, p. 1)
Recd. 9 Nov 1962-22 11 1962

1. Not a highly reflective body - 0.09.

L 34153-65 EED-2/EWT(d)/EWP(1) Pg-4/Pk-4/Po-4/Pq-4 IJP(c) GO/BB/GS
ACCESSION NR: AT5003623 S/0000/64/000/000/0220/0229 22

AUTHOR: Arkhangel'skiy, Yu. B.; Leont'yev, A. V. E+1

TITLE: Converter of a parallel binary code into decimal with an angular or time number presentation intended for a digital-differential-analyzer printer

SOURCE: AN SSSR. Institut elektromekhaniki. Avtomatizirovannyy elektroprivod (Automated electric drive). Leningrad, Izd-vo Nauka, 1964, 220-229

TOPIC TAGS: binary decimal converter, differential analyzer

160
ABSTRACT: A binary-decimal converter is described which is intended as an intermediate link between a 20-digit output register of a differential analyzer and a standard computer printer (15 lines per sec, 16 digits in each line). Each of four parameters is printed once a sec, i. e., the printing pulse frequency is 4 cps. O. S. Belima's method of binary-decimal conversion (Avtomatyka, no. 3, 1962, Kiev) is adopted as this method requires a smaller number of elements per

Card 1/2

L 34253-65

ACCESSION NR: AT5003623

0

decimal digit and ensures high speed. Functional diagrams of the converter and principal circuits of its parts (a trigger, a decade, a square-pulse generator) are given. The converter comprises a binary counter (which registers incoming binary code), a pulse-sequence generator, an OR-code coincidence circuit, a binary-decimal counter with angular or time number presentation, and decoders for each decimal digit. Orig. art. has: 9 figures, 2 formulas, and 2 tables.

ASSOCIATION: none

SUBMITTED: 08Jul64

ENCL: 00

SUB CODE: DP

NO REF SOV: 004

OTHER: 001

Card 2/2

76-32-4-32/43

AUTHORS: Kochergin, S. M., Pobedimskiy, G. R., ~~Leont'yev, A. V.~~

TITLE: The Application of the Radioautographic Method for Investigating Cathodic Depositions of Metals (Primeneniye radioavtografii k issledovaniyu katodnykh osadkov metallov)

PERIODICAL: Zhurnal Fizicheskoy Khimii, 1958, Vol. 32, Nr 4, pp. 930 - 931 (USSR)

ABSTRACT: The results of the experiments were given at the Moscow All-Union Conference on the Current Distribution in the Electric Deposition of Metals in April 1957. Radioautograms of electrolytic silver depositions of cyanide electrolytes were obtained, and an automatic registering microphotometer was used for this. The composition of the electrolytes was $\text{AgCN} - 8,25 \text{ g/l}$; $\text{KCN} - 8,25 \text{ g/l}$, a radioactive isotope Ag^{110} having been added. The silver was deposited on different kinds of copper electrodes (flat, semicylindrical and angular ones). A function between the thickness of the layer of the electrolytic deposition and the blackening of the radiograph was found and defined by an equa-

Card 1/2

76-32-4-32/43

The Application of the Radioautographic Method for Investigating Cathodic
Depositions of Metals

tion. As can be seen from the mentioned diagrams of the different forms of electrodes, as well as from the series of carried out experiments this method is suitable for the determination of the relief of electrolytic depositions and can distinguish between unevennesses down to the order of tenths of microns, when greatest care is applied in taking the radiograph even to one hundredth of a micron. It is to be expected that this method can be used successfully in the investigation of the processes of electrocrystallization of metals and their alloys. There is 1 figure.

ASSOCIATION: Khimiko-tekhnologicheskii institut im. S. M. Kirova, Kazan'
(Kazan', Chemical-Technical Institute imeni S. M. Kirov)

SUBMITTED: May 9, 1957

AVAILABLE: Library of Congress

Card 2/2 1. Metals--Electrodeposition 2. Silver isotopes (Radioactive)
--Applications 3. Autoradiography--Applications

5(0) NAME I BOOK EXTRACTS 807/8019

Exam. Chemical-technology chemistry Institute (Inst. S.M. Elvov

Trudy, 77p. 22, Khimicheskoye nauki (Transactions of the Chemical and Technological Institute Inst. S.M. Elvov, Kazan, 22, Chemical Sciences) Kazan, 1950.

273 p. Breve ally (unreel. 300 copies printed.

Editorial Board: L.S. Mosolov (Inst. S.M. Elvov), A.A. Profurov, (Inst. S.M. Elvov), I. Ye. Myronov (Deputy Inst. S.M. Elvov), O.S. Vozdichenniy, Profurov, A. Ye. Arzharov, Akademichesk. Kh. N. Munkstern, Profurov, S.M. Kuznetsov, Profurov, A.A. Grigor'ev, Profurov, S.A. Chelover, Profurov, Dzh. A. Turkinov (Inst. S.M. Elvov) Moscow; M.L. Ye. Kuznetsov, M.L. I. D. Lysykh.

FOREWORD: This book is intended for industrial chemists, technologists, scientists, teachers, and research students in applied chemistry.

CONTENTS: The collection contains reports by faculty members of the sponsoring institute and also commemorates the 75th year of the birth and first scientific activity of the death of Professor Alexander Mikhailovich Vasil'yev, Doctor of Chemical Sciences and Head of the Faculty. A review of Vasil'yev's scientific activities is given along with a chronological bibliography of his published works and this is given with a list of his students. The collection also contains articles of the members of the Institute under his leadership. Articles of the collection deal mainly with electro-chemistry and the analysis of electrochemical processes, chemical analysis, and investigations of the prospective application of physicochemical phenomena in industrial processes, e.g., cleaning with ultrasound, enhancing the properties of building materials with additives, etc. References are given at the end of each article.

TABLE OF CONTENTS:

Transactions of the Chemical (Cont.)

807/8019

17. Zaslavskiy, S.M., S.A. Pashchuk, and A.V. Kostikov. The Application of Radiography and Microphotometry to Investigations of Metal Distribution at the Cathode 125
18. Zaslavskiy, S.M. Changing the Drying Properties of Clay in the Production of Construction Brick by Introducing Additives (First report) 129
19. Tsybil'skiy, E.B. Ultrasonic Cleaning of Metallic Items 126
20. Zaslavskiy, S.M., S.A. Pashchuk, and A.V. Kostikov. The Removal of Scale in an Ultrasonic Field 129
21. Zaslavskiy, S.M. and O.V. Minin. Study of the Drying Process of Microbiological Ballroom Covers (First report) 125
22. Zaslavskiy, S.M. Application of the Theory of Similarity to the Investigation of Molecular Transfer in Gases 126

Cont 3/6